

A telephonic interview was conducted between Examiner Nguyen and the applicant's undersigned attorney on February 17, 2004. This interview was initiated by the applicant's attorney to request clarification of the bases for the various rejections prior to the preparation of this Response. No exhibits were used.

Claim 10 was discussed in view of the Orscheck patent. The applicant's position was stated as being that Orscheck does not teach or suggest the claimed mechanism defining a load path for supporting a weight of the drive chain bypassing the switch. The Examiner clarified his position stated on page 3, paragraph 2 of the Office Communication by stating that such a mechanism is viewed as being an obvious matter of design choice.

Claim 3 was discussed in view of the Orschek and Hosaka patents. The applicant's position was stated as being that the prior art does not teach or suggest the claimed combination of signals being used in a logic device to provide the claimed alarm indications. This is significant because the alarm is provided before the wheels of the locomotive move. The Examiner suggested that such arguments be submitted via a response to the Office Communication.

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REMARKS

Claims 3-14 are pending in this application. Claims 10-12 and 14 are rejected under 35 USC 103(a) as being unpatentable over Orschek. Claims 3-5 and 9 are rejected under 35 USC 103(a) as being unpatentable over Orschek in view of Hosaka. Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Orschek in view of MacDonnell. Claims 7-8 is rejected under 35 USC 103(a) as being unpatentable over Orschek in view of MacDonnell and further in view of Hosaka. Claim 13 is rejected under 35 USC 103(a) as being unpatentable over Orschek in view of Hosaka and further in view of Hoover.

With regard to the rejection of claims 10-12 and 14 under 35 USC 103(a) in view of Orschek, the applicants re-assert and incorporate by reference herein the arguments provided in Paper No. 4 that the Examiner has failed to provide a prima facie basis for this rejection. The Orschek patent is directed to a passenger locomotive that uses a braking system well known in the art not to include a hand brake and brake chain. Orschek does not even mention a brake chain and switch being part of a brake warning system, nor does Orschek describe possible failure modes for such a system. Independent claim 10 includes the limitation of a "mechanism defining a load path for supporting a weight of the drive chain bypassing the switch" and claim 14 includes the limitation of "a mechanism connecting the switch and the drive chain without supporting a weight of the drive chain through the switch." It is thus impossible for Orschek to provide prima facie support for the rejection of these claims because Orschek is completely lacking any teaching or suggestion of a brake chain. Thus this rejection should be withdrawn. Dependent claims 11 and 12 provide additional structural details that are not taught or suggested in Orschek. These structures provide the solution to a failure mode that is not described or even suggested in Orschek. Thus, even if one applies good engineering practices to Orschek, there is no motivation to arrive at the claimed structure. Thus, claims 11 and 12 provide additional limitations supporting the withdrawal of this rejection.

The applicants also re-assert and incorporate by reference herein the arguments provided in Paper No. 4 that the Examiner has failed to provide a prima facie basis for

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rejection of claims 3-5 and 9 under 35 USC 103(a) as being unpatentable over Orschek in view of Hosaka. The following additional observations may be helpful to the Examiner.

The system of Orschek provides a brake-engaged alarm only after the locomotive is moving, thus risking damage to the brake system. The present invention provides a brake-engaged alarm before the locomotive moves.

The system of Hosaka is an automobile traction control system that detects actual wheel slippage in an automobile during acceleration. Hosaka does not even discuss braking systems, and he does not provide a brake-engaged alarm.

The apparatus and method of claims 3-5 and 9 exploit the combination of two locomotive signals that have not previously been combined (hand brake engaged and reverser in non-neutral position), and they further exploit the simultaneous activation of two alarms (general alarm and wheel slip alarm) at times when that have not previously been simultaneously activated (i.e. irregardless of locomotive speed), to provide an indication of the parking brake being engaged at a point in time that is before the locomotive is actually moved (i.e. as soon as the reverser is moved to a non-neutral position). The combination of Orschek and Hosaka fails to teach or suggest the combination of these two signals, and fails to teach or suggest providing the simultaneous activation of these two alarms upon detecting the combination of these two signals. The combination of Orschek and Hosaka fails to provide the advantage of a brake alarm prior to movement of the locomotive. Thus, this rejection should be withdrawn.

The applicant has amended claim 6 herein to include the limitation of "detecting movement of a mater controller reverser of the locomotive to a non-neutral position coincident with the hand-brake being engaged." This amendment overcomes the rejection of claim 6 under 35 USC 103(a) as being unpatentable over Orschek in view of MacDonnell, thereby placing claim 6 and its dependent claims 7 and 8 in condition for allowance.

The applicants also re-assert and incorporate by reference herein the arguments provided in Paper No. 4 that the rejection of claim 13 under 35 USC 103(a) should be withdrawn because the combination of Orschek, Hosaka and Hoover does not include all of the limitations of claim 13. Claim 13 depends from claim 10, which as argued above, is in condition for allowance. Claim 13 adds additional limitations directed to the circuit of claim 10. In particular, the circuit includes "a logic device having the reverser position signal and the brake engaged signal as inputs and adapted to energize the locked axle indicator when the reverser is in a non-neutral position and the hand brake is in an engaged position." The cited combination of prior art references fails to teach or suggest a logic device having these two inputs, and the references fail to teach or suggest energizing a locked axle indicator upon this combination of non-neutral reverser position plus hand brake engaged. The Hoover locked axle detector utilizes neither a reverser position signal nor a brake-engaged signal, relying instead on axle speed detectors. Thus, the limitations of claim 13 provide additional bases for allowance, and the rejection should be withdrawn.

Claims 3-14 are believed to be in condition for allowance. Reconsideration of the application in light of the above amendments and remarks is respectfully requested.

Respectfully submitted,

David G. Maire

Reg. No. 34,865

Beusse Brownlee Wolter Mora & Maire, P.A.

390 North Orange Avenue

Suite 2500

Orlando, FL 32801

telephone: 407-926-7704 facsimile: 407-926-7720